

Scott A. Galati
GALATI & BLEK LLP
555 Capitol Mall
Suite 600
Sacramento, CA 95814
(916) 441-6575

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

Application for Certification for the
Roseville Energy Park

DOCKET NO. 03-AFC-1

ROSEVILLE ELECTRIC'S
SUPPLEMENTAL COMMENTS ON
THE PRELIMINARY STAFF
ASSESSMENT

Roseville Electric (RE) hereby submits its Supplemental Comments on the Preliminary Staff Assessment (PSA). These comments supplement our Preliminary Comments filed on July 16, 2004. Those Preliminary Comments were filed earlier than the comment deadline to facilitate discussion with Staff and members of the public at the PSA workshop held on July 20, 2004. Where appropriate, we have included relevant information discussed at the PSA workshop.

PROJECT DESCRIPTION

Page 3-6, **PROJECT CONSTRUCTION** - The AFC for the REP originally anticipated that on-site construction would commence immediately after issuance of all permits for the project (anticipated in December, 2004), require an on-site construction duration of 18 to 20 months, and achieve commercial operation by the summer of 2006. That original schedule would have required that all long-lead equipment be pre-ordered at least six months prior to issuance of all permits. Pre-ordered equipment would have thus required payment of substantial progress payments by the City of Roseville prior to issuance of all permits, thus exposing the City to financial risks before all permitting issues are resolved. Another financial risk exposure would have been the need to initiate detailed engineering approximately five months prior to the start of construction and thus prior to the issuance of all permits. Both of these financial risks are avoided or minimized under the current schedule, described below.

Current Construction Schedule.

Under the current construction schedule, the anticipated issuance of all permits remains unchanged for December, 2004. However, long-lead equipment orders are not anticipated to be placed until after all permits are issued. Additionally, the detailed engineering is not anticipated to be initiated until after permits are issued. Thus on-site construction will commence approximately mid-2005. The on-site construction duration remains 18 to 20 months, with an anticipated commercial operation date of January, 2007.

AIR QUALITY

RE previously provided comments on the PSA in its Preliminary Comments docketed on July 16, 2004. These following comments are in addition to those Preliminary Comments.

Page 4.1-28-29, ADEQUACY OF PROPOSED MITIGATION – RE described in its Preliminary Comments that it was modifying the operation of the REP to lower its emissions of NOx to match its current offset package. Specifically, RE discussed this approach with Staff at the PSA Workshop and agreed to present in these Supplemental Comments a complete description of the modified operating profile. Please see Attachment 1 for that description.

At the PSA Workshop, RE discussed with Staff that it had obtained the right to purchase at least 10 tons of NOx emissions from Energy 2001, Inc. These NOx emission reductions will be created by Energy 2001, Inc. in the near future and likely before REP's commercial operation date. Energy 2001, Inc. has obtained air permit number AC-04-09 from the PCAPCD to install reciprocating engines at the Placer County landfill, which will burn landfill gas. This facility is nearing completion of construction and is anticipated to commence operation shortly. Energy 2001, Inc. has entered into a Power Purchase Agreement (PPA) with RE, whereby RE will purchase this renewable energy as part of its electricity purchase portfolio. Based on the addition of future controls approximately 10 tons of NOx ERCs will be created and certified by PCAPCD. RE has entered into an option agreement with Energy 2001, Inc. to purchase at least 10 tons of these NOx ERCs.

Additionally, RE is conducting due diligence relating to purchasing up to 10 tons of NOx emission reductions from the Sacramento Air Quality Management District (SMAQMD) from its Priority Reserve Program.

As discussed with Staff at the PSA workshop, RE requests that Staff incorporate the following Condition of Certification in its FSA to reflect REP's modified operating schedule and corresponding reduction of NOx emissions as well as to allow an increase in NOx emissions of up to 10 tons based on the likely event that RE can secure up to 10

tons of NOx emission reductions utilizing either the Energy 2001, Inc. ERCs or the SMAQMD Priority Reserve Program or a combination of both.

Included with these comments are copies of RE's comments on the PDOC including two spreadsheets which summarize the quarterly and annual NOx emissions for both turbine technologies and one spreadsheet that shows the allocation of offsets per quarter. See Attachment 2. Based upon available ERC's at this time, only the quarterly and annual NOx emissions are proposed to change. The hourly, maximum hourly, daily, and maximum daily will not be modified from the current PDOC or PSA. Please also note that emissions of other criteria pollutants (CO, VOC, SO₂, and PM₁₀) are not being revised. We have also revised the condition numbers to reflect either scenario.

RE requests that **AQ-SC7** be replaced with the following.

AQ-SC7 The Project Owner shall limit facility NOx emissions equivalent to the amounts shown in Table 1a and 2a of Condition of Certification **AQ-16**. The facility may increase its emissions of NOx up to the amounts shown on Table 1b or Table 2b of Condition of Certification **AQ-16** upon completion of the following:

1. The Placer County Air Pollution Control District (PCAPCD) has issued Emission Reduction Credits (ERCs) for the reduction of NOx at the Energy 2001, Inc. electrical generation facility located at the Lincoln landfill; and
2. The Project Owner has surrendered the ERCs to the PCAPCD created in Number 1 above.
3. The Sacramento Metropolitan Air Quality Management District (SMAQMD) issues to the Project Owner a certificate authorizing the use of its Priority Reserve NOx emission reductions as offsets for the REP.

The facility NOx emissions identified in Table 1a and 2a of Condition of Certification **AQ-16** can be increased by an amount equivalent to the amounts of NOx identified on the PCAPCD ERC certificate and/or the SMAQMD certificate after those amounts are discounted in accordance with the appropriate offset ratio as determined in Condition of Certificate **AQ-5**, but not to exceed the total NOx emissions in Table 1b and 2b.

Verification: At least 30 days prior to increasing the emissions of NO_x in excess of Table 1a or 2a of Condition of Certification **AQ-16**, the Project Owner shall submit documentation from the PCAPCD that the additional ERCs and/or SMAQMD authorization to use Priority Reserve NO_x emission reductions as offsets for the REP have been surrendered.

RE also proposes to change the quarterly ERCs under AQ-1 and AQ-2 to the following amounts, reflective of either NO_x and turbine scenario:

1a. If the GE LM-6000 turbines are selected and RE secures NO_x ERCs in the amount of 23.40 tons after offset ratios are applied, emission offsets shall be provided for all calendar quarters for NO_x and PM-10 in the following amounts, at the offset ratio specified in condition 10. (Offsets are not required for CO, SO_x and VOC emissions.)

Table 1a – GE LM6000 - OFFSETS REQUIRED					
POLLUTANT	QUARTER 1 (lbs/quarter)	QUARTER 2 (lbs/quarter)	QUARTER 3 (lbs/quarter)	QUARTER 4 (lbs/quarter)	Tons/year
NO _x	11,337	7,429	15,647	12,379	23.40
PM-10	17,523	15,246	18,999	18,788	35.28

2a. If the Alstom GX100 turbines are selected, and RE secures NO_x ERCs in the amount of 23.40 tons after offset ratios are applied, emission offsets shall be provided for all calendar quarters for NO_x and PM-10 in the following amounts, at the offset ratio specified in condition 10. (Offsets are not required for CO, SO_x and VOC emissions.)

Table 2a - ALSTOM GX100 - OFFSETS REQUIRED					
POLLUTANT	QUARTER 1 (lbs/quarter)	QUARTER 2 (lbs/quarter)	QUARTER 3 (lbs/quarter)	QUARTER 4 (lbs/quarter)	Tons/year
NO _x	11,337	7,429	15,647	12,379	23.40
PM-10	17,673	15,513	19,168	19,158	35.95

1b. If the GE LM-6000 turbines are selected and RE secures NO_x ERCs in the amount of 31.09 tons after offset ratios are applied, emission offsets shall be provided for all calendar quarters for NO_x and PM-10 in the following amounts, at the offset ratio specified in condition 10. (Offsets are not required for CO, SO_x and VOC emissions.)

Table 1b - GE LM6000 - OFFSETS REQUIRED					
POLLUTANT	QUARTER 1 (lbs/quarter)	QUARTER 2 (lbs/quarter)	QUARTER 3 (lbs/quarter)	QUARTER 4 (lbs/quarter)	Tons/year
NO _x	15,546	13,412	17,646	15,572	31.09
PM-10	17,523	15,246	18,999	18,788	35.28

2b. If the Alstom GX100 turbines are selected, and RE secures NO_x ERCs in the amount of 31.09 tons after offset ratios are applied, emission offsets shall be provided for all calendar quarters for NO_x and PM-10 in the following amounts, at the offset ratio specified in condition 10. (Offsets are not required for CO, SO_x and VOC emissions.)

Table 2b - ALSTOM GX100 - OFFSETS REQUIRED					
POLLUTANT	QUARTER 1 (lbs/quarter)	QUARTER 2 (lbs/quarter)	QUARTER 3 (lbs/quarter)	QUARTER 4 (lbs/quarter)	Tons/year
NO _x	15,546	13,412	17,646	15,572	31.09
PM-10	17,673	15,513	19,168	19,158	35.95

AQ 62 and AQ 63 As discussed above, please revise the following conditions to reflect REP's revised quarterly and annual NO_x emissions based upon either the 23.4 tons per year or the 31.09 ton per year scenario. We have re-numbered the conditions to reflect either NO_x scenario.

62a. If the GE LM6000 turbines are selected for the project, the total facility emissions shall not exceed the following quarterly emission rates:

GE LM6000 - FACILITY QUARTERLY EMISSION LIMITS					
POLLUTANT	QUARTER 1 (lbs)	QUARTER 2 (lbs)	QUARTER 3 (lbs)	QUARTER 4 (lbs)	Tons/year
NO _x	11,337	7,429	15,647	12,379	23.40
CO	21,625	19,737	23,500	23,322	44.09
VOC	6,046	5,188	6,596	6,514	12.17
PM ₁₀	17,523	15,246	18,999	18,788	35.28
SO ₂	3,331	2,838	3,630	3,587	6.69

63a. If the Alstom GX100 turbines are selected for the project, the total facility emissions shall not exceed the following quarterly emission rates:

ALSTOM GX100 - FACILITY QUARTERLY EMISSION LIMITS					
POLLUTANT	QUARTER 1 (lbs)	QUARTER 2 (lbs)	QUARTER 3 (lbs)	QUARTER 4 (lbs)	Tons/year
NO _x	11,337	7,429	15,647	12,379	23.40
CO	27,121	33,872	28,515	30,202	59.86
VOC	5,832	7,455	6,672	6,890	13.42
PM ₁₀	17,673	15,513	19,168	19,158	35.95

62b. If the GE LM6000 turbines are selected for the project, the total facility emissions shall not exceed the following quarterly emission rates:

GE LM6000 - FACILITY QUARTERLY EMISSION LIMITS					
POLLUTANT	QUARTER 1 (lbs)	QUARTER 2 (lbs)	QUARTER 3 (lbs)	QUARTER 4 (lbs)	Tons/year
NO _x	15,546	13,412	17,646	15,572	31.09
CO	21,625	19,737	23,500	23,322	44.09
VOC	6,046	5,188	6,596	6,514	12.17
PM ₁₀	17,523	15,246	18,999	18,788	35.28
SO ₂	3,331	2,838	3,630	3,587	6.69

63b. If the Alstom GX100 turbines are selected for the project, the total facility emissions shall not exceed the following quarterly emission rates:

ALSTOM GX100 - FACILITY QUARTERLY EMISSION LIMITS					
POLLUTANT	QUARTER 1 (lbs)	QUARTER 2 (lbs)	QUARTER 3 (lbs)	QUARTER 4 (lbs)	Tons/year
NO _x	15,546	13,412	17,646	15,572	31.09
CO	27,121	33,872	28,515	30,202	59.86
VOC	5,832	7,455	6,672	6,890	13.42
PM ₁₀	17,673	15,513	19,168	19,158	35.95
SO ₂	3,400	2,893	3,709	3,663	6.83

Page 4.1-31, ADEQUACY OF PROPOSED MITIGATION – RE will mitigate the emissions of VOCs and SO₂ through the use of excess VOC and PM₁₀ ERCs.

RE has proposed to offset the NO_x emissions through the use of VOC ERCs. The accepted interpollutant trading ratio for VOC to NO_x is 2.6:1. After applying the PCAPCD distance ratio of 2.0, the total ratio then becomes 5.2:1. This interpollutant trading ratio is the highest in the state. RE is proposing to mitigate, under CEQA, the emissions of VOCs at a one to one (1:1) ratio by taking credit for the banked VOCs that would be used in applying the distance ratio of 2.0. In other words, the remaining VOCs, after being discounted by 2.6, would normally be adjusted to reflect the PCAPCD 2.0 distance ratio. RE believes that since the 2.0 ratio is solely a district requirement and is not required by CEQA, and because of the high offset ratio applied (5.2:1) the emissions of VOCs from the project will be more than fully mitigated under CEQA. RE believes this approach is consistent with the approach for CEQA offsets taken by Staff in other cases.

RE has secured, prior to the 2.6 VOC/NO_x ratio and the 2.0 distance ratio, 67.02 tons of VOCs. After applying the 2.6 VOC/NO_x ratio, 25.78 tons of VOC remain. Using the highest potential emission rate of VOCs from the project produces VOC emissions of 13.42 tons per year. Therefore, RE proposes, based upon the high offset ratio used for the interpollutant VOC for NO_x, that the remaining 25.78 tons would more than fully mitigate the operational emissions of VOC from the project.

RE proposes a similar methodology to mitigate the emissions of SO₂. In the application, RE assumed the sulfur content of the fuel at 0.5 grains/100 dscf. This represented the highest hourly sulfur content recorded at a nearby gas compressor station during 2001. RE proposes, for CEQA, to use the annual average fuel sulfur content of 0.28 grains/100 dscf. This reduces REP's potential annual average emissions of SO₂ from 6.69 tons per year down to 3.75 tons per year. RE has secured excess PM₁₀ credits on the order of 5.09 tons. Assuming, based upon National Park Service Modeling Guidance, that 33% of the SO₂ emissions are converted into sulfates in the atmosphere (after adjusting by the ratio of molecular weights of H₂SO₄/SO₂) the potential for PM₁₀ generation based upon the project SO₂ emissions is 1.85 tons per year. Therefore, RE proposes to surrender an additional 1.85 tons of PM₁₀ ERCs to mitigate the emissions of SO₂ at a 1:1 ratio. This additional 1.85 tons of PM₁₀ ERC's will come from the excess 5.09 tons of PM₁₀ available.

Page 4.1-21- Staff has assumed that the "immediate environment for the REP facility is ammonia limited". Staff further states that REP's proposed ammonia slip has the potential to form secondary PM₁₀. PM₁₀ is a criteria pollutant that is most affected by emissions within the Sacramento Valley and the entire region. Therefore, Staff should recognize that the Sacramento Valley and the region surrounding the REP has extensive agricultural operations and therefore is most likely ammonia rich rather than being ammonia limited. Without further proof that the region is ammonia limited and

that therefore REP's proposed ammonia slip will actually form secondary PM10 in quantities large enough to create significant air quality impact, Staff's recommendation that the REP should reduce its ammonia slip in half is not warranted and inconsistent with the approach taken by the Commission in other cases.

BIOLOGICAL RESOURCES

RE previously provided comments on the PSA in its Preliminary Comments docketed on July 16, 2004. These following comments are in addition to those Preliminary Comments.

Page 4.2-15, para. 2, Indirect Impacts

Staff indicates that the REP would have an indirect effect on 4.6 acres of vernal pool systems. Applicant has changed the project construction plan to minimize impacts to vernal pools by moving the construction laydown area making minor adjustments to the site boundary. See the revised drawing in Attachment 3. Under the Applicant's revised construction plan, the REP's indirect impact acreage would be 2.53 acres. This includes indirect impacts of the permanent project facilities as well as the temporary construction parking and construction office areas, and includes effects on downstream pools connected with vernal pools located within the 250-foot indirect impact buffer area. We therefore propose the following revision to Condition of Certification BIO-13:

BIO-13 As compensation for direct and indirect impacts to vernal pools and vernal pool fairy shrimp, the project owner shall provide mitigation in a form acceptable to USFWS, as specified in the Biological Opinion, according to the mitigation table.

	Direct	Indirect	Total
Impact	0.39	2.53	2.92
Preservation	$0.39 \times 2 = 0.78$	$2.53 \times 2 = 5.06$	5.84
Creation	$0.39 \times 1 = 0.39$	0	0.39
Total	1.17	5.06	6.23

Verification: At least 90 days prior to any site or related facilities mobilization activities, the project owner shall provide to the CPM, for review and approval by staff, USACE and USFWS, either 1) the location for the habitat compensation to be used to preserve and/or create vernal pools; the name of the entity, which would protect the habitat in perpetuity; a plan for an endowment to manage the habitat in perpetuity; and an adaptive management plan to be reviewed and approved by staff in consultation with USFWS; or 2) documentation that the project owner has paid the appropriate amount into the in lieu fee program approved by USFWS.

Additionally, RE and Staff discussed the effect of RE's relocation of the construction laydown area on Staff's determination that upland impacts associated with temporary construction activities were permanent and significant. With the relocation of the construction laydown area and RE's commitment to restore the remaining construction office and parking area, including restoration of the existing soil pile on site, RE believes that Staff can make a finding that the temporary impacts associated with construction activities in these areas are insignificant. Therefore, RE has modified Condition of Certification **BIO-14** as follows:

BIO-14 The project owner shall provide at least ~~3.9~~ **26.5** acres of habitat compensation for direct and indirect impacts to upland habitat suitable for: Swainson's hawk, White-tailed kite, Northern harrier, Burrowing owl, Golden eagle, Horned lark, Ferruginous hawk, Lawrence's goldfinch, Cooper's hawk, Bald eagle, and Oak titmouse. ***The owner shall restore areas used during construction for worker parking and construction offices totaling 5.54 acres to annual grassland foraging habitat by removing gravel, reseeding with native species, and other appropriate measures.***

Verification: At least 60 days prior to any site, or related facilities mobilization activities, the project owner shall provide to the CPM evidence that habitat compensation has been purchased, the name of the entity which will manage the habitat, and that a suitable endowment has been provided to manage the habitat in perpetuity. In addition, the project owner shall provide an adaptive management plan to be reviewed and approved by staff in consultation with CDFG and USFWS. ***The project owner shall also prepare a restoration plan for the construction worker parking and construction offices areas for CPM approval.***

NOISE AND VIBRATION

Page 4.6-22, Proposed Condition of Certification **NOISE 6** – Since the REP is located within the City of Roseville and not the unincorporated area of Placer County, the Placer County Noise Ordinance does not apply. Instead, RE recommends that noise LORS compliance be based on meeting the Roseville Municipal Code for industrial zoned property, which reads:

Notwithstanding the provisions of Section 9.24.100, it is unlawful for any person to create any sound, or to allow the creation of any sound, on property with an industrial zoning designation that is owned, leased, occupied or otherwise controlled by such person where an industrial land

use shares a common property line with a sensitive receptor or is separated from a sensitive receptor by a roadway, which causes the exterior sound level when measured at the property line of any affected sensitive receptor to exceed the ambient sound level by seven (7) dBA, or exceed the sound level standards as set forth in Table 1 by seven (7) dBA, whichever is greater. (Ord. 3638 § 1 (part), 2001.)

Table 1 in Section 9.24.100 reads as follows:

Table 1 SOUND LEVEL STANDARDS (For non-transportation or fixed sound sources)		
Sound Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq} , dB	50	45
Maximum level, dB	70	65

Thus, the most stringent standard is 7 dBA above the nighttime sound level standard of 45 dB L_{eq} , or 52 dB L_{eq} .

In addition, RE suggests revising the condition to recognize the fact that there are presently a total of only three nearby residences. By listing all three residences in the condition, an amendment will not be necessary in the event that residential use is ceased at one or more of the residences. Instead, the community noise monitoring will be conducted at the then closest residence.

RE is also suggesting the addition of a paragraph that allows an alternate noise monitoring location to be used. This procedure has been incorporated into similar conditions in a number of recent siting cases and is believed to be an effective means of determining compliance in the event that the background noise levels change between the time that the original noise surveys are conducted and the plant is operational.

Lastly, RE asks that the time between the performance of the community noise survey and the submission of the report be increased from 15 to 30 days to allow sufficient time for the preparation of the report.

RE requests the following modifications::

NOISE 6: The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due to plant operation alone to exceed **5245 dBA Leq** measured near the residences at 5480 Phillip Road (monitoring location 1), **5490 Phillip Road (monitoring location 2), and 4900 Phillip Road (monitoring location 3)**, and that the noise due to plant operation will comply with **Chapter 9.24, Noise Regulation, of the Roseville Municipal Code** ~~the noise standards of the City of Roseville Noise Ordinance and the Placer County Noise Ordinance.~~

No new pure-tone components may be introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints.

- A. When the project first achieves a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at the monitoring site at 5480 Phillip Road **(or the next closest monitoring site in the event that residential use is ceased at monitoring site 1).** This survey during power plant operation shall also include measurement of one-third octave band sound pressure levels to ensure that no new pure-tone noise components have been introduced.

The measurement of power plant noise for the purposes of demonstrating compliance with this Condition of Certification may alternatively be made at a location, acceptable to the CPM, closer to the plant (e.g., 400 feet from the plant boundary) and this measured level then mathematically extrapolated to determine the plant noise contribution at the nearest residence. However, notwithstanding the use of this alternative method for determining the noise level, the character of the plant noise shall be evaluated at the nearest residence to determine the

presence of pure tones or other dominant sources of plant noise.

- B. If the results from the noise survey indicate that the power plant noise level (L_{eq}) at the affected receptor exceeds the above value for any given hour during the 25-hour period, or that the noise standards of the LORS have been exceeded, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits.
- C. If the results from the noise survey indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

Verification: The survey shall take place within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity. Within ~~30~~45 days after completing the survey, the project owner shall submit a summary report of the survey to the City of Roseville Planning Department, and to the CPM. Included in the survey report will be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures. When these measures are in place, the project owner shall repeat the noise survey.

Within ~~30~~45 days of completion of the new survey, the project owner shall submit to the CPM a summary report of the new noise survey, performed as described above and showing compliance with this condition.

Page 4.6-24, Proposed Condition of Certification **NOISE 8** – In accordance with suggestions by CEC staff at the July 20, 2004 workshop, RE suggests the addition of the following condition to address the potential for annoyance at the three closest residents due to an increase in noise levels resulting from operation of the REP.

NOISE 8: In the event legitimate noise complaints under condition **NOISE 2** are made by the owners of the existing residences located at 5480 Phillip Road (monitoring location 1), 5490 Phillip Road (monitoring location 2), and 4900 Phillip Road (monitoring location 3) during operation of the REP, the project owner shall offer to pay for the following noise attenuating upgrades to the residences:

- Replacement of single -pane windows with dual-pane windows;

- Replacement of hollow-core exterior doors with solid-core doors and weather stripping;
- Air conditioning; and
- Additional sound insulation in exterior walls.

The owner of each residence may select any or all of the above upgrades that the residence owner decides, in his or her sole discretion, but after consulting with the project owner, are appropriate. The residence owner and the project owner shall select a mutually acceptable contractor to perform the upgrades. The project owner shall pay the cost of the upgrades.

Verification: Upgrades shall, unless impossible due to circumstances beyond the project owner's control, be installed within 6 months of the receipt of the complaint. In the first annual compliance report after the receipt of a complaint, the project owner shall include documentation certifying that: 1) the noise-attenuating upgrades were installed on the specified residence at the project owner's expense, 2) the noise attenuating upgrades were already a feature of the residence, 3) installation was offered but refused by an owner, or 4) residential use by the complainant was ceased. In the event noise-attenuating upgrades are not complete at the time the annual compliance report is issued, the report shall include a schedule for the completion of the upgrades and the documentation listed above shall be included in the next annual compliance report.

PUBLIC HEALTH

*Page 4.7-13, Proposed Condition of Certification **Public Health-1*** – RE requests the following modification to the Condition.

Public Health-1 The project owner shall develop and implement a Cooling Water Management Plan to ensure that the ~~potential for bacterial growth in cooling water is~~ **controlled** ~~kept to a minimum.~~ The Plan shall be consistent with either Staff guidelines for the control of bacteria in cooling water or with the Cooling Technology Institute's "Best Practices for Control of Legionella" guidelines.

SOIL AND WATER RESOURCES

Page 4.9-6, last line – RE is not proposing a plume-abated wet cooling tower. Please delete the reference to “plume abated”.

Page 4.9-8, First Paragraph, Natural Gas Pipeline – PG&E should be substituted for RE in the second sentence of the paragraph since PG&E will construct the natural gas pipeline.

Page 4.9-8, Last Paragraph, Natural Gas Pipeline – Please modify this paragraph to reflect that PG&E will be constructing the natural gas pipeline and not the City of Roseville.

Page 4.9-10, Fifth Paragraph – Staff raises concerns about the design and location of the PGWWTP influent junction structure. That structure is existing and is not part of the REP. Therefore, Staff’s should delete any opinions regarding the influent junction structure since it is unrelated and should be outside CEC jurisdiction.

Page 4.9-13, First Paragraph – Staff states that with the 100-year flood level above 83 feet amsl at the outfall location, the lower detention pond is subject to inflow from the tributary during the 100-year flood. Staff goes on to state that no analysis has been provided by the applicant on the potential impacts from this reverse flow.

As a point of clarification, the City of Roseville HEC-RAS analysis predicts a 100-year hydraulic grade line of 82.85 feet, not “above 83 feet”, at the location where the REP storm water outfall will discharge. Staff did not previously express their concern in any data requests or data request workshop; this explains why the applicant has not provided Staff with an analysis. At the PSA workshop, the applicant explained that there is no impact associated with reverse flow in the REP storm water outfall. If, during the 100-year storm event, flood water was to back up into the REP storm drain, the water would flow into the storm water ponds and be contained.

At the PSA workshop, Staff further explained that their concern was that the REP may not be able to discharge flow from the 100-year storm event while the area at the discharge of outfall is flooded, thus causing REP storm water to flow over the top of the storm water pond embankments. In Appendix 7-C of the AFC, the applicant calculated an REP post-construction 100-year storm water flow of 18.12 cfs (8,132 gpm) and conservatively sized the outfall at 30 inches in diameter. At this flow, the head loss per 100 feet is 0.123 feet and the velocity head is 0.212 feet (ref. Cameron Hydraulic Data). Allowing for a total outfall length of 750 feet, an inlet loss K-factor of 0.5 and an outlet loss K-factor of 1.0, the total head loss through the storm water outfall under the 100-year storm flow is estimated as follows:

$$h_L = (750/100 * 0.123) + [(0.5 + 1.0) * 0.212] = 1.24 \text{ feet}$$

Adding this head loss to the downstream hydraulic grade line yields the following water surface elevation in the storm water pond:

$$\text{Water Surface Elevation} = 82.85 + 1.24 = 84.09 \text{ feet}$$

Since the finished grade elevation on the north and east sides of the storm water pond will be approximately 93.00 feet, the REP storm water will clearly not overflow the pond during the 100-year storm event.

Page 4.9-13, Soil and Water Resources Table 2 – Staff has created a table indicating annual water requirements for various systems. Staff should provide a note to the table that these numbers were not provided by RE and were calculated by Staff.

Page 4.9-14, Second to Last Paragraph – Staff describes a discrepancy that it characterizes as “large” and requiring additional information before a complete analysis of the impacts of construction water use can be made. This discrepancy arises from an estimate of water use in the original filing of the AFC in October, 2003 and in the revised estimate of water use provided by the Applicant in December 2003 in response to a data request.. Clearly the December 2003 information supercedes the original filing as the filing was made in order to clarify questions from Staff to obtain Staff’s recommendation that the AFC was data adequate. Staff did not file any subsequent data request seeking further information on this point. More importantly, Staff has the most current information and can complete its final analysis. The request for additional information should be deleted.

Page 4.9-15, First Full Sentence – Staff misquotes Section 14.17.010 of the City of Roseville Municipal Code by stating that the use of recycled water for all construction activities is required. The exact language of the Code should be included which is as follows:

B. Where the use of recycled water is feasible, appropriate and acceptable to all applicable regulatory agencies for the purposes of landscape irrigation, agricultural irrigation, filling of decorative fountains, in office buildings for toilet flushing, construction water, industrial process water, or recreational/ornamental impoundments or other uses permitted by the regulatory agencies, it is the policy of the city to require the applicant, owner or customer to use recycled water in lieu of potable water. Each such usage of recycled water shall, in addition, be subject to the availability of facilities and the feasibility of making such facilities available now or in the foreseeable future.

Page 4.9-15, Second to Last Paragraph – Staff requested the location of the potable water well. It is shown on Figure 2.2-1 and 2.2-2 of the AFC. However, to provide

additional clarification, RE has provided the attached markup of Figure 2.2-1. (See Attachment 4)

*Page 4.9-22, Proposed Condition of Certification **SOILS&WATER 1*** – RE requests that Staff replace its version of this Condition with **SOILS&WATER 1** included in the Final Decision for the Turlock Irrigation District Walnut Energy Center Project (02-AFC-04). For Staff's convenience that condition is reproduced below.

SOILS&WATER-1: The project owner shall comply with all of the requirements of the General NPDES Permit for Discharges of Storm Water Associated with Construction Activity. The project owner shall develop and implement a Storm Water Pollution Prevention Plan for the construction of the entire project (construction SWPPP). The project owner shall submit copies to the CPM of all correspondence between the project owner and the RWQCB regarding this permit.

Verification: The project owner shall submit copies to the CPM of all correspondence between the project owner and the RWQCB about the General NPDES permit for the Discharge of Storm Water Associated with Construction Activities within 10 days of its receipt (when the project owner receives correspondence from the RWQCB), or within 10 days of its mailing (when the project owner sends correspondence to the RWQCB). This information shall include copies of the Notice of Intent and Notice of Termination for the project.

*Page 4.9-23, Proposed Condition of Certification **SOILS&WATER 2*** – RE requests that Staff replace its version of this Condition with **SOILS&WATER 2** included in the Final Decision for the Turlock Irrigation District Walnut Energy Center Project (02-AFC-04). For Staff's convenience that condition is reproduced below.

SOILS&WATER-2: Prior to beginning any site mobilization activities for any project element, the project owner shall obtain CPM approval for a site specific Drainage, Erosion and Sedimentation Control Plan that addresses all project elements and ensures protection of water quality and soil resources, demonstrates no increase in off-site flooding potential or sedimentation, meets local requirements, provides legible drawings and complete narrative, and provides for monitoring and maintenance of all mitigation measures under the Plan. The plan shall be consistent with the grading and drainage plan as required by **Condition of Certification CIVIL-1** and may incorporate by reference any SWPPP developed in conjunction with any NPDES permit.

Verification: No later than 60 days prior to the start of any site mobilization for any project element, the project owner shall submit the Drainage, Erosion and Sedimentation Control Plan to the CPM for review and approval. This plan shall address appropriate methods and actions, both temporary and permanent, for the protection of water quality and soil resources, demonstrate no increase in offsite flooding potential, meet local requirements, include legible drawings, details and complete narrative, and identify all monitoring and maintenance activities. No later than 60 days prior to start of any site mobilization, the project owner shall submit a copy of the plan to City of Roseville for review and comment. Any comments shall be provided to the CPM within 30 days of receipt of the plan. The plan must be approved by the CPM prior to start of any site mobilization activities. During construction, the project owner shall provide a report in the monthly compliance report on the effectiveness of the drainage, erosion and sediment control activities, and the results of monitoring and maintenance activities. Once operational, the project owner shall provide in the annual compliance report information on the results of monitoring and maintenance activities.

Page 4.9-24 and 25, Proposed Condition of Certification **SOIL&WATER 4** – Staff's proposed condition requires that reclaimed water be used for all construction and hydrostatic testing. Staff relies on City of Roseville Municipal Code Section 14.17.010 B for such a requirement. However, the Code Section does allow for use of potable water under certain circumstances such as availability and feasibility of reclaimed water and facilities to deliver the water. Therefore, RE requests Staff simply reference the City of Roseville Municipal Code in the Condition to provide clarity as follows:

SOIL&WATER 4 The REP shall use reclaimed water for **cooling tower makeup and process water**. **The REP shall use reclaimed water for** construction, hydrostatic testing, ~~cooling tower makeup, process water,~~ landscape irrigation and all other nonpotable uses **in accordance with Section 14.17.010 of the City of Roseville Municipal Code**. The REP shall comply with all requirements of Title 22 and Title 17 California Code of Regulations. Prior to delivery of recycled water to the REP **for cooling tower makeup and process water**, the owner shall submit a Title 22 Engineer's Report that has been approved by the Department of Health Services and the CVRWQCB.

Verification: At least ~~30~~ 60 days....

Page 4.9-25, Proposed Condition of Certification **SOIL&WATER 5** – The reporting requirements of this condition are burdensome and are not necessary to ensure that the REP is using recycled water. RE requests that the condition be modified as follows.

SOIL&WATER 5: Prior to commercial operation, the project owner shall install metering devices as part of the water supply and distribution system to monitor and record in gallons per day, 1) total volumes of potable and reclaimed **recycled** water supplied to the REP, ~~and 2) volumes used for cooling purposes, potable water, non-cooling process water supplies, irrigation, wash water, demineralized water and turbine injection.~~ Those metering devices shall be operational for the life of the project. An annual summary of daily **recycled and monthly potable** water use by the REP, ~~differentiating between potable and reclaimed water,~~ shall be submitted to the CPM in the annual compliance report.

Verification: ~~At least 60 days prior to~~ Prior to REP commercial operation, the project owner shall submit to the CPM evidence that metering devices have been installed and are operational on the pipelines serving and within the project. The project owner shall provide a report on the servicing, testing and calibration of the metering devices in the annual compliance report.

The project owner shall submit a water use summary report to the CPM in the annual compliance report for the life of the project. The annual summary report shall be based on and shall distinguish recorded daily use of ~~potable and recycled water~~ **and monthly use of potable water.** ~~Included in the annual summary of water use, the project owner shall submit copies of meter records from the City of Roseville documenting the quantities of tertiary treated recycled water provided (in gpd) by the PG&WTP and potable groundwater supplied over the previous year. The report shall include calculated monthly range, monthly average, and annual use by the project in both gallons per minute and acre feet. After the first year and for subsequent years, this information shall also include the yearly range and yearly average recycled and potable water used by the project.~~

Page 4.9-26; Proposed Condition of Certification **SOIL&WATER 7** – RE requests that this condition be modified to reflect that PG&E will be building the natural gas pipeline and therefore the condition should be applicable only to the sanitary wastewater pipeline. RE requests the following modifications

SOIL&WATER 7: The proposed ~~gas and~~ sanitary wastewater pipelines shall be located below the anticipated depth of scour from a 100 year flood at all creek crossing locations. The depth of pipeline burial shall be extended a sufficient distance away from the creek banks to avoid anticipated lateral erosion. Trenched water crossings shall be constructed during the dry season using "in the dry" construction techniques that avoid trenching within open or flowing water. Creek beds at trenched crossings shall be restored to their natural contours and revegetated.

Verification: At least ~~60~~ 30 days prior to site mobilization for the proposed ~~gas and~~ sanitary wastewater pipelines, the project owner shall submit to the CPM, an analysis (plan) prepared by a registered civil engineer. The analysis (plan) shall demonstrate that the proposed pipelines would be below the expected 100 year depth of scour at all creek crossings and will remain at that depth for a sufficient distance from the creek banks to avoid any lateral erosion that can be reasonably expected to occur during the life of the project. The CPM must approve the analysis (plan) prior to any site mobilization activities for those pipelines.

TRAFFIC AND TRANSPORTATION

Page 4.10-17, Proposed Condition of Certification **TRANS-1** – RE requests the following minor modifications to **TRANS-1** to accommodate a more realistic construction work schedule and to reflect the fact that RE will not be constructing the gas pipeline.

TRANS-1 The project owner shall develop a construction traffic control plan that limits peak hour construction-period truck and commute traffic in coordination with the City of Roseville Public Works Department. The project owner shall also consult with Placer County, Caltrans, and the City of Roseville staff dealing with traffic regulation enforcement. Specifically, the overall traffic control plan shall include the following:

- Require the primary contractor and major subcontractors to advise workers, develop and implement a construction employee carpool program, and to avoid using Foothills Boulevard;
- Through worker education and shift scheduling, **seek to** maximize worker commute trips during off-peak hours (off-peak hours are (1) before 67:00 AM; (2) between

9:00 AM and 4:00 PM; and (3) after 6:00 PM or other hours as agreed to by the CPM;

- Schedule heavy equipment and building material deliveries as well as the movement of materials and equipment to the site, including the adjacent laydown area to occur during off-peak hours **to the extent feasible**; and

The construction traffic control plan shall also include the following restrictions on construction traffic addressing the following for linear facilities **that will be constructed by the project owner**:

- Timing of water and ~~gas~~ pipeline construction shall ensure that all **water** pipeline construction affecting local roads shall take place outside the peak traffic periods to avoid traffic flow disruptions, or other hours as agreed to by the CPM;
- Signing lighting, and traffic control device placement;
- Temporary travel lane closures and potential need for flagman;
- Maintaining access to adjacent residential and commercial properties; and
- Emergency access.

Verification: At least 630 days prior to the start of site mobilization, the project owner shall provide to Placer County, the City of Roseville, and the California Highway Patrol for review and comment, and to the CPM for review and approval, a copy of its construction traffic control plan.

Page 4.10-18, Proposed Condition of Certification **TRANS-4** – RE requests the following clarification be added to **TRANS-4**.

TRANS-4 The project owner shall ensure that permits and/or licenses are secured from the California Highway Patrol and Caltrans for the transport of all hazardous materials **requiring permits or licenses**, and that all federal and state

regulations for the transport of hazardous materials are observed.

Page 4.10-19, Proposed Condition of Certification TRANS-6 – RE request that the verification be modified to allow the road mitigation plans to be submitted 60 days prior to site mobilization instead of 90 days.

TRANSMISSION LINE SAFETY AND NUISANCE

Page 4.11-11, Proposed Condition of Certification TLSN-1 – RE request the following modification to clarify the requirements identified in the verification to the proposed condition apply only to the overhead section of the transmission line.

Verification: At least 30 days before starting construction of RE's transmission lines or related structures and facilities, the project owner shall submit to the CPM a letter from Roseville Electric affirming that the *overhead section of the* proposed REP line will be constructed according to the requirements of GO-95, GO-52, Title 8, Section 2700 et seq. of the California Code of Regulations, and RE's EMF-reduction guidelines arising from CPUC Decision 93-11-013.

VISUAL RESOURCES

Page 4.12-12-4.12-16, Visual Plumes – Subsequent to the PSA Workshop, Staff transmitted additional information relating to its visual plume assessment. RE has reviewed the material and believes that Staff's approach overestimates the frequency and size of plumes that may be generated from the facility. First, RE believes that the SACTIP model should be used to assess visual plume statistics. Second, RE believes that the key components of the analysis should not just be whether a plume can form, but should also include a significance threshold to determine whether a visible plume can be considered a significant impact to visual resources within the area. For example, Staff's statistics include hours of visible plume formation within a distance that is less than the diameter of the cooling tower shroud. At this point the plume has just left the top of the cooling tower cell and is still completely saturated. Third, the SACTIP model was never intended to model HRSG stack plumes, and needs substantial modification to obtain useful results. We are in the process of making these needed modifications. Additionally, Staff's analysis does not take into account that small plumes (dimensions of which are less than the cooling tower length, width, or height) would dissipate quickly and not be significant. Staff's plume analysis also assumed much more duct firing and hours of operation for the REP than currently proposed. RE is currently completing its own visual plume analysis, which will be docketed under separate cover. Based on our initial SACTIP modeling results, RE believes that visible plumes will not significantly impact visual resources because the predicted plume size is small relative to the REP structures and the predicted probability of visible plume

formation is low when considering that a visible plume will only be noticed during daylight hours when adverse weather conditions are not present, such as fog, low ceilings and rain.

*Page 4.12-30, Proposed Condition of Certification **VIS-2*** – RE suggested modifications to **VIS-2** in its Preliminary Comments on the PSA. At the Public Workshop, Staff and RE discussed it would not be necessary for RE to install landscaping on all four sides of the REP under the West Roseville Specific Plan Guidelines. RE explained that landscaping on the western site boundary would not be required because the only potential viewer from the west would be industrial facilities. Residential areas planned further west would view the industrial area, which will block the REP from view. Landscaping is not necessary on the southern boundary because immediately south of the REP site is the PGWWTP. Landscaping between these two industrial facilities would be burdensome and would provide no visual benefit. Thus, under the WRSP Guidelines, landscaping would only be required along the future re-routing of Phillip Road to the east of the site, and along the future extension of Blue Oaks Boulevard, to the north of the site, consistent with the timing of the future development of these two roadways.

Also at the PSA Workshop, RE described other details in the WRSP Guidelines that would be employed by developers in the area. RE believes that as long as the REP is consistent with these guidelines, the Staff can make a finding that the REP will comply with the local LORS. While a portion of the WRSP Guidelines were included as an attachment to Data Responses, we have docketed the full WRSP on August 3, 2004 for Staff's reference. We trust that this information would enable Staff to adopt the proposed modifications to **VIS-4** suggested by RE in its Preliminary Comments on the PSA.

FACILITY DESIGN

*Page 5.1-6, Proposed Condition of Certification **GEN-2*** – RE requests the following items be removed from Table 1 Major Structures and Equipment List.

- Power Cycle Makeup and Storage Pumps Foundation and Connections – Delete because this is minor, not major, equipment.
- Cooling Tower Makeup Pumps Foundation and Connections – Delete because this is minor, not major, equipment.
- Closed Cycle Cooling Water Heat Exchanger Foundation and Connections – Delete because the REP will not have this feature. The REP will employ an open system.

- Waste Water Collection System Foundations and Connections – Delete because this is minor, not major, equipment.
- Natural Gas Metering Station Structure, Foundations and Connections - Delete because this is minor, not major, equipment.
- Gas Compressor Building Structure, Foundations and Connections – Delete because the REP will not have this feature
- Sound Wall at Property Line – Delete because the REP will not be constructing a sound wall at the property line.
- HVAC and Refrigeration Systems - Delete because this is minor, not major, equipment.
- Temperature Control and Ventilation Systems (including water and sewer connections) - Delete because this is minor, not major, equipment.
- Electrical Duct Banks - Delete because this is minor, not major, equipment.

In addition to the deletions, RE requests the verification timeline be modified from 60 to 30 days.

Page 5.1-9-5.1-12, Proposed Condition of Certification GEN-5 – RE requests that any reference or requirement to use an Engineering Geologist be deleted. An Engineering Geologist is simply not required. The issues related to soil conditions and fill materials cannot be approved by an Engineering Geologist in California. An Engineering Geologist should only be used if there are unique geologic features such as active faults that require further field delineation. THE REP site does not exhibit any unique geologic features that would require such further delineation. An Engineering Geologist cannot design foundations or approve construction. All of these services must be provided by or under the direct supervision of a geotechnical or civil engineer.

These references are located at the top of page 5.1-10, Item C; Section C. on page 5.1-11; and in the first paragraph of the Verification on page 5.1-12.

TRANSMISSION SYSTEM ENGINEERING

Page 5.5-1, First Paragraph – The project reference to “Roseville Electric Park” should be modified to “Roseville Energy Park”.

Page 5.5-3, Transmission Line – The section reference to “wood” structures should be modified to “steel” structures.

Page 5.5-10, Proposed Condition of Certification TSE-1 – RE requests the verification timeline be modified from 60 to 30 days.

Page 5.5-11, Proposed Condition of Certification TSE-3 - RE requests the verification timeline be modified from 60 to 30 days.

Dated: August 11, 2004

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Scott A. Galati", with a horizontal line drawn underneath it.

SCOTT A. GALATI
Attorney for Roseville Electric

Attachments 1 through 4